

WHAT IS CLAIMED IS:

1. A method of identifying a compound which modulates activity of a target RNA comprising
 - identifying at least one molecular interaction site on said target RNA
 - generating *in silico* a virtual library of compounds predicted or calculated to interact with said molecular interaction site; and
 - comparing three dimensional representations of said target RNA with members of the virtual library of compounds to generate a hierarchy of said compounds ranked in accordance with their respective ability to form physical interactions with said molecular interaction site.
2. The method of claim 1 further comprising synthesizing the highly ranked members of said hierarchy of compounds.
3. The method of claim 2 further comprising testing said highly ranked members to determine their ability to interact with said molecular interaction site.
4. The method of claim 2 further comprising contacting the target RNA with at least one of said highly ranked members to provide a complex between the RNA and the member or members;
 - ionizing said complex;
 - fragmenting the ionized complex; and
 - determining whether highly ranked members binds to the molecular interaction site of said RNA.
5. The method of claim 4 further comprising determining the strength of binding of a highly ranked member in comparison to the binding strength of other highly ranked members.
6. A method of identifying a compound which modulates activity of a target biomolecule comprising
 - identifying at least one molecular interaction site on said target biomolecule;
 - generating *in silico* a virtual library of compounds predicted or calculated to interact with said molecular interaction site; and

comparing three dimensional representations of said target biomolecule with members of the virtual library of compounds to generate a hierarchy of said compounds ranked in accordance with their respective ability to form physical interactions with said molecular interaction site.

7. The method of claim 6 further comprising synthesizing the highly ranked members of said hierarchy of compounds.
8. The method of claim 7 further comprising testing said highly ranked members to determine their ability to interact with said molecular interaction site.
9. The method of claim 7 further comprising contacting the target biomolecule with at least one of said highly ranked members to provide a complex between the RNA and the member or members;
ionizing said complex;
fragmenting the ionized complex; and
determining whether highly ranked members binds to the molecular interaction site of said biomolecule.
10. The method of claim 9 further comprising determining the strength of binding of a highly ranked member in comparison to the binding strength of other highly ranked members.
11. A compound identified in accordance with claim 1.
12. A method of modulating the action of an RNA comprising contacting said RNA with a compound identified in accordance with claim 1.
13. A pharmaceutical, agricultural chemical or industrial chemical comprising a compound identified in accordance with claim 1.
14. A compound identified in accordance with claim 6.
15. A method of modulating the action of a biomolecule comprising contacting said RNA with a compound identified in accordance with claim 6.
16. A pharmaceutical, agricultural chemical or industrial chemical comprising a compound identified in accordance with claim 6.
17. A method of identifying a compound which modulates activity of a target RNA comprising

generating *in silico* a virtual library of compounds predicted or calculated to interact with said RNA;

comparing three dimensional representations of said target RNA with members of the virtual library of compounds to generate a hierarchy of said compounds ranked in accordance with their respective ability to form physical interactions with said molecular interaction site; and

synthesizing the highly ranked members of said hierarchy of compounds.

18. The method of claim 17 further comprising testing said highly ranked members to determine their ability to interact with said molecular interaction site.

19. The method of claim 18 further comprising contacting the target RNA with at least one of said highly ranked members to provide a complex between the RNA and the member or members;

ionizing said complex;

fragmenting the ionized complex; and

determining whether highly ranked members binds to the molecular interaction site of said RNA.

20. The method of claim 19 further comprising determining the strength of binding of a highly ranked member in comparison to the binding strength of other highly ranked members.

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